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                   STN AnaVist, now available
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 NEWS  5  AUG 30   CA/CAplus -Increased access to 19th century research documents
 NEWS  6  AUG 30   CASREACT - Enhanced with displayable reaction conditions
 NEWS  7  SEP 09   ACD predicted properties enhanced in REGISTRY/ZREGISTRY
 NEWS  8  OCT 03   MATHDI removed from STN
 NEWS  9  OCT 04   CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                   to core patent offices
 NEWS 10  OCT 06   STN AnaVist workshops to be held in North America
 NEWS 11  OCT 13   New CAS Information Use Policies Effective October 17, 2005

 NEWS EXPRESS  JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

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FILE 'HOME' ENTERED AT 18:34:18 ON 14 OCT 2005

=> file ca, biosis,medline
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FILE 'MEDLINE' ENTERED AT 18:36:52 ON 14 OCT 2005
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=> s (betaine hcl) or (betaine hydrochloric acid)
L1         242 (BETAINE HCL) OR (BETAINE HYDROCHLORIC ACID)

=> s pepsin
L2       41097 PEPSIN

=> s l1 and l2
L3          13 L1 AND L2

=> d 1-13 ab,bib

L3   ANSWER 1 OF 13  CA  COPYRIGHT 2005 ACS on STN
AB   The present invention provides a stabilized protonic formulation comprised
     primarily of proteins, enzymes and pH adjusters, all in specific ratios to
     one another, a liquid medium which, when combined to the protonic
     formulation, initiates activation of the amino acids within the protonic
     formulation, and a stabilizing component which stabilizes the amino acids
     during the process of their activation.  The optimum ratio of enzyme
     activator formulation to protein mixture is about 1:25, though 1 part enzyme
     activator formulation to 10 to 30 parts protein mixture will function
     suitably for the intended purpose.  The enzyme activator formulation is
     optimally comprised of: betaine-HCl 4.0%,
     pepsin 1.5%, trypsin 0.4%, chymotrypsin 0.3%, protease 0.4%,
     bromelain 0.5%, papaya 0.6%, vitamin C 5.0%, lemon powder 0.6%, glutamic
     acid 0.2%, and glycine 86.4%.  The protein sources and mixture that works
     best with the enzyme activator formulation includes: whey protein isolate
     30.0%, instant whey concentrate 15.0%, soy protein isolate 25.0%, pea protein
     5.0%, rice protein 5.0%, maltodextrin 15.7%, steviocide 0.3%, french
     vanilla flavor 1.75%, peach mango flavor 0.5%, xanthan gum 0.5%, lecithin
     0.5%, and tricalcium phosphate 0.75%.  Clin. tests and studies have shown
     that, with use of the protonic mixture, about 30 to 40% more amino acids are
     utilized than when the protonic mixture is not used.
AN   143:114482  CA
TI   Protein formulation comprising enzymes and pH adjusters for improved
     bioavailability of amino acids
IN   Ernest, Michael
PA   Doctor's Signature Sales and Marketing International Corp., USA
SO   U.S. Pat. Appl. Publ., 11 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 2005152887        A1    20050714    US 2004-757706         20040114
PRAI US 2004-757706             20040114

L3   ANSWER 2 OF 13  CA  COPYRIGHT 2005 ACS on STN
AB   A complex enzyme composition that improves growth and feed digestion by animals
     comprises pancreatin 200, betaine-HCl 50, monobasic
     calcium phosphate 100, α-amylase 150, β-amylase 100, lipase 50,
     pepsin 100, and cellulase 100 mg.
AN   142:218044  CA
TI   Complex enzyme composition containing pancreatin, betaine-
     HCl, and calcium phosphate as feed additive
IN   Han, In Kyu
PA   S. Korea
SO   Repub. Korean Kongkae Taeho Kongbo, No pp. given
     CODEN: KRXXA7
DT   Patent
LA   Korean
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   KR 2002041162        A     20020601    KR 2000-70943          20001127
PRAI KR 2000-70943              20001127

L3   ANSWER 3 OF 13  CA  COPYRIGHT 2005 ACS on STN
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AB A composition containing betaine hydrochloride and **pepsin** as powders, pancreatin, α-amylase, β-amylase, lipase, cellulase, dibasic calcium phosphate as an enzyme complex, Lactobacillus acidophilus, Bifidobacteria longum, fructooligosaccharide or the like as a probiotics complex, a vitamin complex and a mineral complex is provided which inhibits proliferation of intestinal harmful microorganisms and enhances immunoactivity. The composition contains 78 mg **betaine HCl**, 50 mg **pepsin**, 15 mg pancreatin, 11 mg α-amylase, 8 mg β-amylase, 4 mg lipase, 7.5 mg cellulase, 7.5 mg dibasic calcium phosphate, 1.25 billon Lactobacillus acidophilus, Lactobacillus bulgaricus, etc. 900 million Bifidobacteria longum and Bifidobacterium breve, 180 million Streptococcus thermophilus, 375 mg fructooligosaccharide, 450 IU vitamin A, 675 IU β-carotene, 56 mg vitamin C, 23 IU vitamin D, 23 IU vitamin E, 7.5 μg vitamin K, 3.8 mg thiamine, 3.4 mg riboflavin, 5.6 mg niacin, 3.4 mg pyridoxine, 11 μg cobalamin, 28 μg biotin, 8.4 mg pantothenic acid, 8.4 mg choline, 28.1 mg Ca, 18.8 mg P, 0.9 mg Fe, 12 μg I, 17 mg Mg, 1.7 mg Zn, 11 μg Se, 0.1 mg sulfuric acid, 0.6 mg Mn, 11 μg chromium picolinate, 0.6 mg Mo, 0.6 mg K, 0.3 mg betaine, 0.2 mg B, 3.8 mg L-lysine 2.0 mg phenylalanine, 2.0 mg L-tyrosine, a trace amount of kelp powder and 4.7 mg polyunsatd. fatty acid.
AN 142:204717 CA
TI Nutrients containing betaine, enzymes, Lactobacillus, Bifidobacteria, fructooligosaccharides, vitamins and minerals
IN Han, In Kyu; Kim, Yu Yong
PA S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2003025587	A	20030329	KR 2001-58713	20010921
PRAI	KR 2001-58713		20010921		

L3 ANSWER 4 OF 13 CA COPYRIGHT 2005 ACS on STN
AB A protonic formulation is provided comprising a protein mixture and a mix. of enzymes and pH adjusters selected for proper activation, pH adjustment, and attainment of pK for the amino acids and optimization of bioavailability of the amino acids. The optimum ratio of enzyme activator formulation to protein mixture is about 1:25, though 1 part enzyme activator formulation to 10-30 parts protein mixture will function suitably for the intended purpose. The enzyme activator formulation is optimally comprised of: **betaine-HCl** 4.0%, **pepsin** 1.5%, trypsin 0.4%, chymotrypsin 0.3%, protease 0.4%, bromelain 0.5%, papaya 0.6%, vitamin C 5.0%, lemon powder 0.6%, glutamic acid 0.2%, and glycine 86.4%. The protein sources and mixture that works best with the enzyme activator formulation includes: whey protein isolate 30.0%, instant whey concentrate 15.0%, soy protein isolate 25.0%, pea protein 5.0%, rice protein 5.0%, maltodextrin 15.7%, steviocide 0.3%, french vanilla flavor 1.75%, peach mango flavor 0.5%, xanthan gum 0.5%, lecithin 0.5%, and tricalcium phosphate 0.75%. Clin. tests have shown that, with use of the protonic mixture, about 30-40% more amino acids are utilized than when the protonic mixture is not used.
AN 138:169167 CA
TI Protein formulation with enzymes and pH adjusters for improved bioavailability of amino acids
IN Ernest, Michael
PA Life Force International, USA
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003014304	A2	20030220	WO 2002-US24662	20020802

WO 2003014304 A3 20030501
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-311280P P 20010809

L3 ANSWER 5 OF 13 CA COPYRIGHT 2005 ACS on STN
AB An herbal formulation useful as a food supplement for re-establishing intestinal bacteria and rebuilding intestinal mucosa comprises 25-35% **betaine HCl**, 2-7% plant enzymes, 1-4% papain, 0.5-5% probiotic micro flora, 2-7% fructooligosaccharides, 5-15% L-glutamine, 2-7% quercitin, 2-7% butyric acid, 5-15% borage seed, 5-15% flax seed, 5-10% lecithin, and 5-15% of a mixture containing γ-oryzanol, bromelain, **pepsin**, and N-acetylglucosamine. The formulation may be mixed together, compressed and formed into a capsule for oral administration.
AN 137:129879 CA
TI Herbal formulation containing enzymes for rebuilding intestinal bacteria
IN Terry, Travis L.; Watson, Tommy Stanley; Watson, Brenda F.
PA Renew Life, Inc., USA
SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6426099	B1	20020730	US 1998-204036	19981201
PRAI US 1997-67271P	P	19971203		

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L3 ANSWER 6 OF 13 CA COPYRIGHT 2005 ACS on STN
AB The therapeutic efficacy of dexamethasone and a natural pig surfactant preparation was investigated in a rabbit aspiration model. Lung injury was induced by intratracheal administration of 2 mL of a **betaine-HCl-pepsin** mixture/kg. Dexamethasone was given i.v. in two doses (D1 = 7.5 mg/kg; D2 = 3.75 mg/kg; D2 6 h post D1). In different groups D1 was injected at different times before and after aspiration. Natural surfactant was administered 24 h post lung injury in a single dose of 12 mg phospholipids/kg. The therapeutic potential was evaluated by measuring static lung compliance and the difference in a lung volume between 0 and 20 mm Hg airway pressure. No therapeutic effect of dexamethasone was seen at any time of application. In contrast, the intratracheal administration of natural surfactant 24 h post injury completely reversed the deterioration of lung mech. properties.
AN 119:86523 CA
TI Experimental aspiration trauma: Comparison of steroid treatment versus exogenous natural surfactant
AU Strohmaier, W.; Schlag, G.
CS Ludwig Boltzmann Inst. Exp. Clin. Traumatol., Vienna, Austria
SO Experimental Lung Research (1993), 19(3), 397-405
CODEN: EXLRDA; ISSN: 0190-2148
DT Journal
LA English

L3 ANSWER 7 OF 13 CA COPYRIGHT 2005 ACS on STN
AB Pharmaceuticals for treatment of digestive tract disorders in domestic animals contain **betaine-HCl** 10-30, antacid carbohydrate digestive enzymes 1-10, antacid cellulose-degrading enzymes 1-10, antacid protein digestive enzymes 20-40, and saccharification bacteria spore powder 10-30% by weight Thus, a pharmaceutical was prepared by

mixing **betaine-HCl** 200, carbohydrate digestive enzyme 50, a cellulose degrading enzyme 50, sugar-containing **pepsin** 300, saccharification bacterial spore powder 200, lactose 100 parts by weight, and potato starch q.s.

AN 112:62655 CA
TI Pharmaceuticals for treatment of digestive tract disorders of domestic animals
IN Masuda, Takashi
PA Toa Yakuhin Kogyo K: K., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01132533	A2	19890525	JP 1987-289628	19871118
PRAI JP 1987-289628		19871118		

L3 ANSWER 8 OF 13 CA COPYRIGHT 2005 ACS on STN
AB The characteristic enzymic activity, using the gastrointestinal model, of the acid-resistant digestive enzyme which had been added to the preparation containing **betaine-HCl** was determined and compared with those of folk digestive enzyme prepns. The deviation of the wts. of those prepns. was also investigated. The present preparation shows it digestive activity in the acid range and act in the stomach. The digestive activity using the shaking methods and the separated methods, i.e. amylase, protease and lipase did not fulfill the standard activity of the digestive enzyme prepns. The digestion using the gastrointestinal model was about the same as that of the digestive enzyme prepns. fulfilling th criteria and, especially in the gastric model, it was same or more than that. The prepns. in which more than 2 types of granules, had been mixed fulfilled the requirements of the weight variation in the Japanese Pharmacopoeis, but the mixture ratio of those was variable.
AN 109:176308 CA
TI The characteristic digestive activity of the preparation containing betaine hydrochloride
AU Murakami, Tadayasu; Kawashima, Mikio; Sasaki, Masanori; Kobayashi, Shinichi; Yamada, Fusayo; Asahina, Kikuo
CS Res. Lab., Toa Pharm. Co., Ltd., Tatebayashi, 374, Japan
SO Yakuri to Chiryo (1973-2000) (1988), 16(2), 771-8
CODEN: YACHDS; ISSN: 0386-3603
DT Journal
LA Japanese

L3 ANSWER 9 OF 13 CA COPYRIGHT 2005 ACS on STN
AB Oval compns. for decreasing the symptoms of digestive dysfunction contain a pancreatic enzyme extract, a protelytic enzyme from plants, a choleretic agent, a HCl source and **pepsin** [9001-75-6]. Bromelain [9001-00-7] and pancreatin [8049-47-6] were adsorbed onto digestible sucrose-starch beads which were coated with while lac glaze. These beads were then coated with stearic acid and carnauba wax. A mixture of ox bile extract, **pepsin**, **betaine-HCl** [590-46-5] and guar gum was blended with H2O to give a dough which was screened, dried, and the resultant granules ground and dry-screened to the mesh. The granules were mixed with the coated beads and blended with hydrogenated vegetable oil, microcryst. cellulose, and Mg stearate. The mixture was punched into tablets and coated with a zein solution
AN 101:28325 CA
TI Enzyme-containing digestive aid compositions
IN Bilton, Gerald L.
PA USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 4447412	A	19840508	US 1983-462995	19830201
	WO 8503438	A1	19850815	WO 1984-US159	19840203
	W: JP				
	RW: AT, BE, CH, DE, FR, GB, LU, NL, SE				
	EP 172166	A1	19860226	EP 1984-901130	19840203
	R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE				
	CA 1213543	A1	19861104	CA 1984-447208	19840210
PRAI	US 1983-462995		19830201		
	WO 1984-US159	A	19840203		

L3 ANSWER 10 OF 13 CA COPYRIGHT 2005 ACS on STN
AB A review with refs. of **betaine-HCl** [590-46-5], glutamic acid-HCl [138-15-8], diluted HCl, and **pepsin** [9001-75-6] as ingredients in over-the-counter (OTC) drug products for use as stomach acidifiers. Based upon the lack of adequate data to establish the effectiveness of these or any other ingredients of stomach acidifiers used in treating achlorhydria and hypochlorhydria, and because such conditions are asymptomatic and not ameniable to self-diagnosis, any OTC drug product containing ingredients offered for use as stomach acidifiers cannot be considered generally recognized as safe and effective.
AN 92:47160 CA
TI Stomach acidifier drug products for over-the-counter human use; proposed rulemaking
CS Food and Drug Administration, Rockville, MD, 20857, USA
SO Federal Register (1979), 44(204), 60316-20, 19 Oct 1979
CODEN: FEREAC; ISSN: 0097-6326
DT Journal; General Review
LA English

L3 ANSWER 11 OF 13 CA COPYRIGHT 2005 ACS on STN
AB A combination of 455 mg. **betaine-HCl** and 60 mg. **pepsin** (1:10,000 U.S.P. unit), having the mixed powder particles coated with 141 mg. methylcellulose, is placed in capsules. The mixture is useful as a gradual producer of HCl in patients with achlorhydria or hypochlorhydria. Glutamic acid-HCl can replace the **betaine-HCl**.
AN 51:83316 CA
OREF 51:15073b-c
TI Preparation containing betaine hydrochloride for treatment of achlorhydria and hypochlorhydria
IN Sahyun, Melville
DT Patent
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2798837		19570709	US	

L3 ANSWER 12 OF 13 CA COPYRIGHT 2005 ACS on STN
AB Betaine unites with HCl loosely to form a compound which readily breaks up into its components in aqueous solution Because of this property the substance forms a convenient medium for the administration of HCl. **Betaine-HCl** contains 23.8% of HCl. Acidol is a proprietary name for the substance and its mixts. with **pepsin** are called "acidol-**pepsin**." **Betaine-HCl** is a white, crystalline, odorless substance of an acid reaction and taste. About 10 yrs. ago the acid contents of acidol and of acidol-**pepsin** were determined The amts. found were substantially as claimed. The acid was determined by titration with N KOH, using phenolphthalein as indicator, and by precipitation with AgNO3 and weighing as AgCl. Recently new specimens of each product were examined The old products were reexamd. and the results compared. The acidity and the proteolytic activity of the new specimens were essentially as claimed. The acidity of the old specimens had not changed much in 10 yrs., but the proteolytic activity had disappeared.
AN 14:18796 CA
OREF 14:3501b-d
TI Acidol and acidol-**pepsin**

AU Anon.
SO Rep. Lab. Am. Med. Assoc. (1919), 12, 91-3
DT Journal
LA Unavailable

L3 ANSWER 13 OF 13 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AB An herbal formulation comprises **betaine HCl**, plant enzymes, papain, probiotic micro flora, fruitooligosaccharides, l-glutamine, quercitin, butyric acid, borage seed, flax seed, lecithin, gamma oryzanol, bromelain, **pepsin**, and N-acetylglucosamine.
AN 2002:477375 BIOSIS
DN PREV200200477375
TI Herbal formulation for rebuilding intestinal bacteria.
AU Terry, Travis L. [Inventor, Reprint author]; Watson, Tommy Stanley [Inventor]; Watson, Brenda F. [Inventor]
CS Clearwater, FL, USA
ASSIGNEE: Renew Life, Inc., Clearwater, FL, USA
PI US 6426099 20020730
SO Official Gazette of the United States Patent and Trademark Office Patents, (July 30, 2002) Vol. 1260, No. 5. http://www.uspto.gov/web/menu/patdata.html. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
ED Entered STN: 11 Sep 2002
Last Updated on STN: 11 Sep 2002

=> s whey protein
L4 9182 WHEY PROTEIN

=> s soy protein
L5 8269 SOY PROTEIN

=> s l4 and l5
L6 276 L4 AND L5

=> s l4 (p) l5
L7 249 L4 (P) L5

=> d his

(FILE 'HOME' ENTERED AT 18:34:18 ON 14 OCT 2005)

FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 18:36:52 ON 14 OCT 2005
L1 242 S (BETAINE HCL) OR (BETAINE HYDROCHLORIC ACID)
L2 41097 S PEPSIN
L3 13 S L1 AND L2
L4 9182 S WHEY PROTEIN
L5 8269 S SOY PROTEIN
L6 276 S L4 AND L5
L7 249 S L4 (P) L5

=> s l1 and l2 and l4 and l5
L8 2 L1 AND L2 AND L4 AND L5

=> d 1-2 ab,bib

L8 ANSWER 1 OF 2 CA COPYRIGHT 2005 ACS on STN
AB The present invention provides a stabilized protonic formulation comprised primarily of proteins, enzymes and pH adjusters, all in specific ratios to one another, a liquid medium which, when combined to the protonic formulation, initiates activation of the amino acids within the protonic formulation, and a stabilizing component which stabilizes the amino acids during the process of their activation. The optimum ratio of enzyme activator formulation to protein mixture is about 1:25, though 1 part enzyme activator formulation to 10 to 30 parts protein mixture will function

suitably for the intended purpose. The enzyme activator formulation is optimally comprised of: **betaine-HCl** 4.0%, **pepsin** 1.5%, trypsin 0.4%, chymotrypsin 0.3%, protease 0.4%, bromelain 0.5%, papaya 0.6%, vitamin C 5.0%, lemon powder 0.6%, glutamic acid 0.2%, and glycine 86.4%. The protein sources and mixture that works best with the enzyme activator formulation includes: **whey protein** isolate 30.0%, instant whey concentrate 15.0%, **soy protein** isolate 25.0%, pea protein 5.0%, rice protein 5.0%, maltodextrin 15.7%, steviocide 0.3%, french vanilla flavor 1.75%, peach mango flavor 0.5%, xanthan gum 0.5%, lecithin 0.5%, and tricalcium phosphate 0.75%. Clin. tests and studies have shown that, with use of the protonic mixture, about 30 to 40% more amino acids are utilized than when the protonic mixture is not used.

AN 143:114482 CA
TI Protein formulation comprising enzymes and pH adjusters for improved bioavailability of amino acids
IN Ernest, Michael
PA Doctor's Signature Sales and Marketing International Corp., USA
SO U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005152887	A1	20050714	US 2004-757706	20040114
PRAI	US 2004-757706		20040114		

L8 ANSWER 2 OF 2 CA COPYRIGHT 2005 ACS on STN
AB A protonic formulation is provided comprising a protein mixture and a mix. of enzymes and pH adjusters selected for proper activation, pH adjustment, and attainment of pK for the amino acids and optimization of bioavailability of the amino acids. The optimum ratio of enzyme activator formulation to protein mixture is about 1:25, though 1 part enzyme activator formulation to 10-30 parts protein mixture will function suitably for the intended purpose. The enzyme activator formulation is optimally comprised of: **betaine-HCl** 4.0%, **pepsin** 1.5%, trypsin 0.4%, chymotrypsin 0.3%, protease 0.4%, bromelain 0.5%, papaya 0.6%, vitamin C 5.0%, lemon powder 0.6%, glutamic acid 0.2%, and glycine 86.4%. The protein sources and mixture that works best with the enzyme activator formulation includes: **whey protein** isolate 30.0%, instant whey concentrate 15.0%, **soy protein** isolate 25.0%, pea protein 5.0%, rice protein 5.0%, maltodextrin 15.7%, steviocide 0.3%, french vanilla flavor 1.75%, peach mango flavor 0.5%, xanthan gum 0.5%, lecithin 0.5%, and tricalcium phosphate 0.75%. Clin. tests have shown that, with use of the protonic mixture, about 30-40% more amino acids are utilized than when the protonic mixture is not used.

AN 138:169167 CA
TI Protein formulation with enzymes and pH adjusters for improved bioavailability of amino acids
IN Ernest, Michael
PA Life Force International, USA
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003014304	A2	20030220	WO 2002-US24662	20020802
	WO 2003014304	A3	20030501		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-311280P P 20010809

=> d his

(FILE 'HOME' ENTERED AT 18:34:18 ON 14 OCT 2005)

FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 18:36:52 ON 14 OCT 2005

L1	242	S	(BETAINE HCL) OR (BETAINE HYDROCHLORIC ACID)
L2	41097	S	PEPSIN
L3	13	S	L1 AND L2
L4	9182	S	WHEY PROTEIN
L5	8269	S	SOY PROTEIN
L6	276	S	L4 AND L5
L7	249	S	L4 (P) L5
L8	2	S	L1 AND L2 AND L4 AND L5

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=> d his

     (FILE 'HOME' ENTERED AT 18:34:18 ON 14 OCT 2005)

     FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 18:36:52 ON 14 OCT 2005
L1           242 S (BETAINE HCL) OR (BETAINE HYDROCHLORIC ACID)
L2         41097 S PEPSIN
L3            13 S L1 AND L2
L4          9182 S WHEY PROTEIN
L5          8269 S SOY PROTEIN
L6           276 S L4 AND L5
L7           249 S L4 (P) L5
L8             2 S L1 AND L2 AND L4 AND L5
L9          3128 S NERVOUS SYSTEM DISORDERS
L10            0 S L7 AND L9
L11            0 S AUTISM AND L7

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Database: US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term: l7 and l20

Display: 20 **Documents in Display Format:** - **Starting with Number** 20

Generate: ○ **Hit List** ◉ **Hit Count** ○ **Side by Side** ○ **Image**

Search Clear Interrupt

Search History

DATE: Friday, October 14, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
L21	l7 and l20	45	L21
L20	probiotic	1982	L20
L19	l7 and l15	0	L19
L18	l7 and l17	0	L18
L17	autism	2661	L17
L16	L15 and l8	0	L16
L15	nervous system disorder	7489	L15
L14	l8 and autism	0	L14
L13	l1 and l2 and l5 and l6	1	L13
L12	l10 and l9 and l1 and l2	1	L12
L11	l9 same l10	126	L11
L10	soy protein isolate	1489	L10
L9	whey protein isolate	538	L9
L8	l5 same l6	949	L8
L7	l5 and l6	1267	L7
L6	soy protein	6505	L6

L5	whey protein	5285	L5
L4	whey protein isolate	538	L4
L3	l1 and l2	13	L3
L2	pepsin	21063	L2
L1	betaine hcl or betaine hydrochloric acid	78	L1

END OF SEARCH HISTORY